

AMENDMENTS TO THE CLAIMS

Claims 1 - 42. Canceled.

Claim 43. (New) A method comprising:

receiving, at a service module, a multiplexed channel signal that includes at least one digital video channel and at least one analog video channel;

receiving, via a two-way communications path from at least one of a plurality of room interface units associated with the service module, a request to transmit the at least one digital video channel or at least one analog video channel; and

in response to the request, converting the at least one digital video channel or the at least one analog video channel from its frequency within the multiplexed channel signal to a predetermined frequency that corresponds to the at least one of the plurality of room interface units.

Claim 44. (New) The method of claim 43 further comprising:

passing the at least one digital video channel through a band pass filter with a narrow frequency band.

Claim 45. (New) The method of claim 44 wherein the narrow frequency band is centered at the output of a programmable converter within the local service module.

Claim 46. (New) The method of claim 43 wherein the at least one digital video channel is received from a Personal Video Recorder.

Claim 47. (New) The method of claim 43 wherein the at least one digital video channel is received from a Video On Demand Server.

Claim 48. (New) The method of claim 43 wherein the at least one digital video channel is received from a Personal Computer.

Claim 49. (New) The method of claim 43 wherein the multiplexed channel signal further includes a DOCSIS forward channel carried from an Internet service provider to a customer and the method further comprises:

converting the DOCSIS forward channel to a different frequency than the frequency of the DOCSIS forward channel within the multiplexed channel signal.

Claim 50. (New) The method of claim 43 further comprising:

receiving, via the two-way communications path from the at least one of the plurality of room interface units, information for selecting a certain channel.

Claim 51. (New) The method of claim 50 wherein the information received from the at least one of the plurality of room interface units further includes a DOCSIS return channel for transmission to an Internet service provider.

Claim 52. (New) The method of claim 50 wherein the information for selecting a certain channel includes information identifying a frequency corresponding to the certain channel within the multiplexed channel signal.

Claim 53. (New) The method of claim 52 further comprising:

tuning to the frequency corresponding to the certain channel within the multiplexed channel signal.

Claim 54. (New) The method of claim 52 further comprising:

converting the frequency corresponding to the certain channel within the multiplexed channel signal from a first frequency to a second frequency corresponding to the at least one of the plurality of room interface units.

Claim 55. (New) The method of claim 43 wherein the at least one digital video channel includes MPEG-4 encoded information.

Claim 56. (New) The method of claim 43 further comprising:

transmitting, via the two-way communications path, the at least one digital video channel or the at least one analog video channel at the predetermined frequency to the at least one of a plurality of room interface units; and

wherein the request to transmit the at least one digital video channel or at least one analog video channel is received via the two-way communications path.

Claim 57. (New) The method of claim 56 wherein the two-way communications path is a cable.

Claim 58. (New) The method of claim 57 wherein the cable is a coaxial cable.

Claim 59. (New) The method of claim 43 wherein the request to transmit the at least one digital video channel or at least one analog video channel takes the form of a signal received at the predetermined frequency.

Claim 60. (New) The method of claim 43 wherein at least one digital video channel is converted from its frequency within the multiplexed channel signal to a predetermined frequency that corresponds to the at least one of the plurality of room interface units, the method further comprising:

- assembling the at least one digital video channel into a single frequency-multiplexed transmission signal; and

- transmitting the single frequency-multiplexed transmission signal to the at least one of the plurality of room interface units at the predetermined frequency.

Claim 61. (New) The method of claim 43 wherein the at least one of the plurality of room interface units transmits channel selection information to the service module and the method further comprises:

- processing the channel selection information to obtain the at least one digital video channel or at least one analog video channel from the multiplexed channel signal.

Claim 62. (New) The method of claim 43 further comprising:

- selecting, at the at least one of the plurality of room interface units, the predetermined frequency that corresponds to the at least one of the plurality of room interface units; and
- transmitting, to the service module, information identifying the predetermined frequency.

Claim 63. (New) A method comprising:

receiving, at a local service module, a multiplexed channel signal that includes at least one digital video channel and at least one analog video channel;

receiving, via a two-way communications path from the room interface unit, a request to transmit the at least one digital video channel or at least one analog video channel;

identifying the at least one digital video channel or at least one analog video channel within the multiplexed channel signal;

in response to the request, converting the at least one digital video channel or the at least one analog video channel from its frequency within the multiplexed channel signal to a predetermined frequency that corresponds to the room interface unit; and

transmitting the at least one digital video channel or the at least one analog video channel at the predetermined frequency to the room interface unit via the two-way communications path.

Claim 64. (New) The method of claim 63 further comprising:

passing the at least one digital video channel through a band pass filter with a narrow frequency band.

Claim 65. (New) The method of claim 64 wherein the narrow frequency band is centered at the output of a programmable converter within the local service module.

Claim 66. (New) The method of claim 63 wherein the at least one digital video channel is received from a Personal Video Recorder.

Claim 67. (New) The method of claim 63 wherein the at least one digital video channel is received from a Video On Demand Server.

Claim 68. (New) The method of claim 63 wherein the at least one digital video channel is received from a Personal Computer.

Claim 69. (New) The method of claim 63 wherein the multiplexed channel signal further includes a DOCSIS forward channel carried from an Internet service provider to a customer and the method further comprises:

converting the DOCSIS forward channel to a different frequency than the frequency of the DOCSIS forward channel within the multiplexed channel signal.

Claim 70. (New) The method of claim 63 further comprising:

receiving, via the two-way communications path from the room interface unit, information for selecting a certain channel.

Claim 71. (New) The method of claim 70 wherein the information received from the at least one of the plurality of room interface units further includes a DOCSIS return channel for transmission to an Internet service provider.

Claim 72. (New) The method of claim 70 wherein the information for selecting a certain channel includes information identifying a frequency corresponding to the certain channel within the multiplexed channel signal.

Claim 73. (New) The method of claim 72 further comprising:
tuning to the frequency corresponding to the certain channel within the multiplexed channel signal.

Claim 74. (New) The method of claim 72 further comprising:
converting the frequency corresponding to the certain channel within the multiplexed channel signal from a first frequency to a second frequency corresponding to the at least one of the plurality of room interface units.

Claim 75. (New) The method of claim 63 wherein the at least one digital video channel includes MPEG-4 encoded information.

Claim 76. (New) The method of claim 63 wherein the transmission of the at least one digital video channel or the at least one analog video channel at the predetermined frequency to the room interface unit and the request to transmit the at least one digital video channel or at least one analog video channel are communicated via the two-way transmission path.

Claim 77. (New) The method of claim 76 wherein the two-way transmission path is a cable.

Claim 78. (New) The method of claim 77 wherein the cable is a coaxial cable.

Claim 79. (New) The method of claim 63 wherein the request to transmit the at least one digital video channel or at least one analog video channel takes the form of a signal received at the predetermined frequency.

Claim 80. (New) The method of claim 63 wherein at least one digital video channel is converted from its frequency within the multiplexed channel signal to a predetermined frequency that corresponds to the room interface unit, the method further comprising:

assembling the at least one digital video channel into a single frequency-multiplexed transmission signal; and

transmitting the single frequency-multiplexed transmission signal to the room interface unit at the predetermined frequency.

Claim 81. (New) The method of claim 63 wherein the room interface unit transmits channel selection information to the service module and the method further comprises:

processing the channel selection information to obtain the at least one digital video channel or at least one analog video channel from the multiplexed channel signal.

Claim 82. (New) The method of claim 81 wherein the room interface unit transmits channel selection information via cabling.

Claim 83. (New) The method of claim 82 wherein the cable is coaxial cabling.

Claim 84. (New) A system comprising:

a service module adapted to receive a multiplexed channel signal that includes at least one digital video channel and at least one analog video channel;

a request module adapted to receive, via a two-way communications path from at least one of a plurality of room interface units associated with the service module, a request to transmit the at least one digital video channel or at least one analog video channel; and

a conversion module adapted to convert, in response to the request, the at least one digital video channel or the at least one analog video channel from its frequency within the multiplexed channel signal to a predetermined frequency that corresponds to the at least one of the plurality of room interface units.

Claim 85. (New) The system of claim 84 wherein the at least one digital video channel is passed through a band pass filter with a narrow frequency band.

Claim 86. (New) The system of claim 85 wherein the narrow frequency band is centered at the output of a programmable converter within the local service module.

Claim 87. (New) The system of claim 84 wherein the at least one digital video channel is received from a Personal Video Recorder.

Claim 88. (New) The system of claim 84 wherein the at least one digital video channel is received from a Video On Demand Server.

Claim 89. (New) The system of claim 84 wherein the at least one digital video channel is received from a Personal Computer.

Claim 90. (New) The system of claim 84 wherein the multiplexed channel signal further includes a DOCSIS forward channel carried from an Internet service provider to a customer and the conversion module is further adapted to convert the DOCSIS forward channel to a different frequency than the frequency of the DOCSIS forward channel within the multiplexed channel signal.

Claim 91. (New) The system of claim 84 further comprising:

an information receiving module adapted to receive, via the two-way communications path from the at least one of the plurality of room interface units, information for selecting a certain channel.

Claim 92. (New) The system of claim 91 wherein the information received from the at least one of the plurality of room interface units further includes a DOCSIS return channel for transmission to an Internet service provider.

Claim 93. (New) The system of claim 91 wherein the information for selecting a certain channel includes information identifying a frequency corresponding to the certain channel within the multiplexed channel signal.

Claim 94. (New) The system of claim 93 further comprising:
a tuning module adapted to tune to the frequency corresponding to the certain channel within the multiplexed channel signal.

Claim 95. (New) The system of claim 93 wherein the conversion module is further adapted to convert the frequency corresponding to the certain channel within the multiplexed channel signal from a first frequency to a second frequency corresponding to the at least one of the plurality of room interface units.

Claim 96. (New) The system of claim 84 wherein the at least one digital video channel includes MPEG-4 encoded information.

Claim 97. (New) The system of claim 84 further comprising:
a transmission module adapted to transmit, via a two-way communications path, the at least one digital video channel or the at least one analog video channel at the predetermined frequency to the at least one of a plurality of room interface units; and
wherein the request to transmit the at least one digital video channel or at least one analog video channel is received via the two-way communications path.

Claim 98. (New) The system of claim 97 wherein the two-way communications path is a cable.

Claim 99. (New) The system of claim 98 wherein the cable is a coaxial cable.

Claim 100. (New) The system of claim 84 wherein the request to transmit the at least one digital video channel or at least one analog video channel takes the form of a signal received at the predetermined frequency.

Claim 101. (New) The system of claim 84 wherein at least one digital video channel is converted from its frequency within the multiplexed channel signal to a predetermined frequency

that corresponds to the at least one of the plurality of room interface units, the system further comprising:

- an assembly module adapted to assemble the at least one digital video channel into a single frequency-multiplexed transmission signal; and

- a transmission module adapted to transmit the single frequency-multiplexed transmission signal to the at least one of the plurality of room interface units at the predetermined frequency.

Claim 102. (New) The system of claim 84 wherein the at least one of the plurality of room interface units transmits channel selection information to the service module and the system further comprises:

- a processing module adapted to process the channel selection information to obtain the at least one digital video channel or at least one analog video channel from the multiplexed channel signal.

Claim 103. (New) The system of claim 84 further comprising:

- a selection module adapted to select, at the at least one of the plurality of room interface units, the predetermined frequency that corresponds to the at least one of the plurality of room interface units; and

- a transmission module adapted to transmit, to the service module, information identifying the predetermined frequency.

Claim 104. (New) A system comprising:

a service module adapted to receive a multiplexed channel signal that includes at least one digital video channel and at least one analog video channel;

a request module adapted to receive, via a two-way communications path from the room interface unit, a request to transmit the at least one digital video channel or at least one analog video channel;

an identification module adapted to identify the at least one digital video channel or at least one analog video channel within the multiplexed channel signal;

a conversion module adapted to convert, in response to the request, the at least one digital video channel or the at least one analog video channel from its frequency within the multiplexed channel signal to a predetermined frequency that corresponds to the room interface unit; and

a transmission module adapted to transmit the at least one digital video channel or the at least one analog video channel at the predetermined frequency to the room interface unit via the two-way communications path.

Claim 105. (New) The system of claim 104 wherein the at least one digital video channel is passed through a band pass filter with a narrow frequency band.

Claim 106. (New) The system of claim 105 wherein the narrow frequency band is centered at the output of a programmable converter within the local service module.

Claim 107. (New) The system of claim 104 wherein the at least one digital video channel is received from a Personal Video Recorder.

Claim 108. (New) The system of claim 104 wherein the at least one digital video channel is received from a Video On Demand Server.

Claim 109. (New) The system of claim 104 wherein the at least one digital video channel is received from a Personal Computer.

Claim 110. (New) The system of claim 104 wherein the multiplexed channel signal further includes a DOCSIS forward channel carried from an Internet service provider to a customer and the conversion module is further adapted to convert the DOCSIS forward channel to a different frequency than the frequency of the DOCSIS forward channel within the multiplexed channel signal.

Claim 111. (New) The system of claim 104 further comprising:

an information receiving module adapted to receive, via the two-way communications path from the room interface unit, information for selecting a certain channel.

Claim 112. (New) The system of claim 111 wherein the information received from the at least one of the plurality of room interface units further includes a DOCSIS return channel for transmission to an Internet service provider.

Claim 113. (New) The system of claim 111 wherein the information for selecting a certain channel includes information identifying a frequency corresponding to the certain channel within the multiplexed channel signal.

Claim 114. (New) The system of claim 113 further comprising:

a tuning module adapted to tune to the frequency corresponding to the certain channel within the multiplexed channel signal.

Claim 115. (New) The system of claim 113 wherein the conversion module is further adapted to convert the frequency corresponding to the certain channel within the multiplexed channel signal from a first frequency to a second frequency corresponding to the at least one of the plurality of room interface units.

Claim 116. (New) The system of claim 104 wherein the at least one digital video channel includes MPEG-4 encoded information.

Claim 117. (New) The system of claim 104 wherein the transmission of the at least one digital video channel or the at least one analog video channel at the predetermined frequency to the room interface unit and the request to transmit the at least one digital video channel or at least one analog video channel is received via the two-way communications path.

Claim 118. (New) The system of claim 117 wherein the two-way communications path is a cable.

Claim 119. (New) The system of claim 118 wherein the cable is a coaxial cable.

Claim 120. (New) The system of claim 104 wherein the request to transmit the at least one digital video channel or at least one analog video channel takes the form of a signal received at the predetermined frequency.

Claim 121. (New) The system of claim 104 wherein at least one digital video channel is converted from its frequency within the multiplexed channel signal to a predetermined frequency that corresponds to the room interface unit, the system further comprising:

an assembly module adapted to assemble the at least one digital video channel into a single frequency-multiplexed transmission signal; and

a transmission module adapted to transmit the single frequency-multiplexed transmission signal to the room interface unit at the predetermined frequency.

Claim 122. (New) The system of claim 104 wherein the room interface unit transmits channel selection information to the service module and the system further comprises:

a processor module adapted to process the channel selection information to obtain the at least one digital video channel or at least one analog video channel from the multiplexed channel signal.

Claim 123. (New) The system of claim 122 wherein the room interface unit transmits channel selection information via cabling.

Claim 124. (New) The system of claim 123 wherein the cable is coaxial cabling.